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(71) Applicant (for all designated States except US): AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH [SG/SG]; 20 Biopolis Way #07-01, Centros, Singapore 138668 (SG).

- (72) Inventors: and
- (75) Inventors/Applicants (for US only): NAGARAJA RAO,

Bhanu Prakash Kirgaval [IN/SG]; Block 709, Jurong West Street 71, #04-32, Singapore 640709 (SG). NOWIN-SKI, Wieslaw, Lucjan [PL/SG]; 111 Clementi Road, NUS Kent Vale, Block C #10-06, Singapore 129792 (SG).

- (74) Agent: WATKIN, Timothy, Lawrence, Harvey; Lloyd Wise, Tanjong Pagar, P.O. Box 636, Singapore 910816 (SG).
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(54) Title: AUTOMATIC IDENTIFICATION OF THE ANTERIOR AND POSTERIOR COMMISSURE LANDMARKS

Set initial threshold Reduce Binarise the image Threshold Attempt to identify CC No Is threshold less than 40% identified? of initial threshold? Yes Yes Ouit: CC not found Are CC and Separate CC& fornix fornix using boundary Yes

(57) Abstract: The AC and/or PC landmarks are identified in a midsagittal MRI image by firstly identifying structures in the brain (specifically the fornix and/or brainstem) as groups of pixels in a radiological image which have an intensity in ranges defined by one or more thresholds and which obey predefined geometrical criteria. The thresholds are varied until the predefined geometrical criteria are met. Initial estimates of the position of the AC and/or PC are derived from the identified structures. These estimates can be improved in various ways, especially by making use of axial and/or corona/ radiological images in planes including, and/or proximate to, the initial estimated position of the AC and/or PC.

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